



299-E28-73 (A6824) Log Data Report

Borehole Information:

Borehole: 299-E28-73 (A6824)		Site:	241-B-361 Settling Tank		
Coordinates (WA St Plane)	GWL^{1} (ft):	None	GWL Date:	05/21/08
North (m)	East (m)	Drill Date	TOC ² Elevation	Total Depth (ft)	Type
136712.3	573770.1	05/1979	689	40	Cable Tool

Casing Information:

		Outer	Inside			
Casing Type	Stickup (ft)	Diameter (in.)	Diameter (in.)	Thickness (in.)	Top (ft)	Bottom (ft)
Welded Steel	0	6 5/8	6	5/16	0	40

Borehole Notes:

Borehole information was taken from Mactec-Ers Log Data Report dated 06/17/2002 by S. Sobczyk. Logger measured the casing diameter using a steel tape confirming the prior Log Data Report casing information.

The purpose of this logging event was to determine locations of well completion materials.

Logging Equipment Information:

Logging System:	Gamma 4H		Type: Serial No.:	NMLS H310800352
Effective Calibration Date:	11/06/07	Calibration Reference:	HGLP-CC-021	
		Logging Procedure:	HGLP-MAN-002, Rev. 0	

Neutron Moisture Logging System (NMLS) Log Run Information:

Log Run	1	2 Repeat	
Date	05/21/08	05/21/08	
Logging Engineer	Spatz	Spatz	
Start Depth (ft)	0.0	25.0	
Finish Depth (ft)	39.50	35.0	
Count Time (sec)	15	15	
Live/Real	R	R	
Shield (Y/N)	N	N	
MSA Interval (ft)	0.25	0.25	
ft/min	N/A	N/A	
Pre-Verification	DHE22CAB	DHE22CAB	
Start File	DHE22000	DHE22159	
Finish File	DHE22158	DHE22199	
Post-Verification	DHE22CAA	DHE22CAA	
Depth Return Error (in.)	Low 1	0	
Comments	None	None	

Logging Operation Notes:

Data were collected using Gamma 4, HO 68B-3573. Pre- and post-survey verification measurements were acquired in the standard field verifier. Maximum logging depth was 39.64 ft. before the sonde un-weighted. A centralizer was installed on the sonde.



HGLP-LDR-214, Rev. 0

Analysis Notes:

Analyst: M.J. Legler	Date:	05/22/08	Reference:	GJO-HGLP 1.6.3, Rev. 0
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The pre- and post survey verification measurements met the acceptance criteria for the established system.

Log spectra were processed in batch mode using APTEC SUPERVISOR to compile count data. Concentrations for count rate and conversion to volumetric moisture were calculated using an EXCEL template identified as G4HNov07.xls

Results and Interpretations:

Neutron Moisture data was converted to volumetric moisture. The log event was to determine presence of grout and other completion materials. Grout appears to be present at 2 to 22 ft, bentonite from 22 to 32 ft, and sand from 32 ft to bottom of borehole.

Repeat section indicates good agreement.

List of Log Plots:

Depth Reference is top of casing

Moisture Repeat Section of Moisture

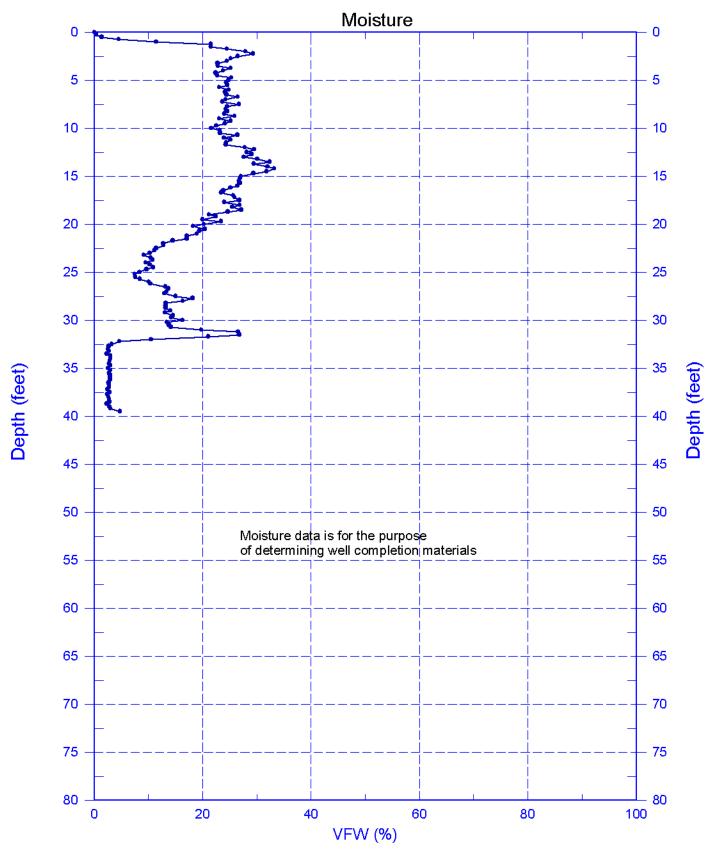
¹ GWL – groundwater level

² TOC – top of casing



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Moisture





299-E28-73 (A6824) Moisture Repeat Section

